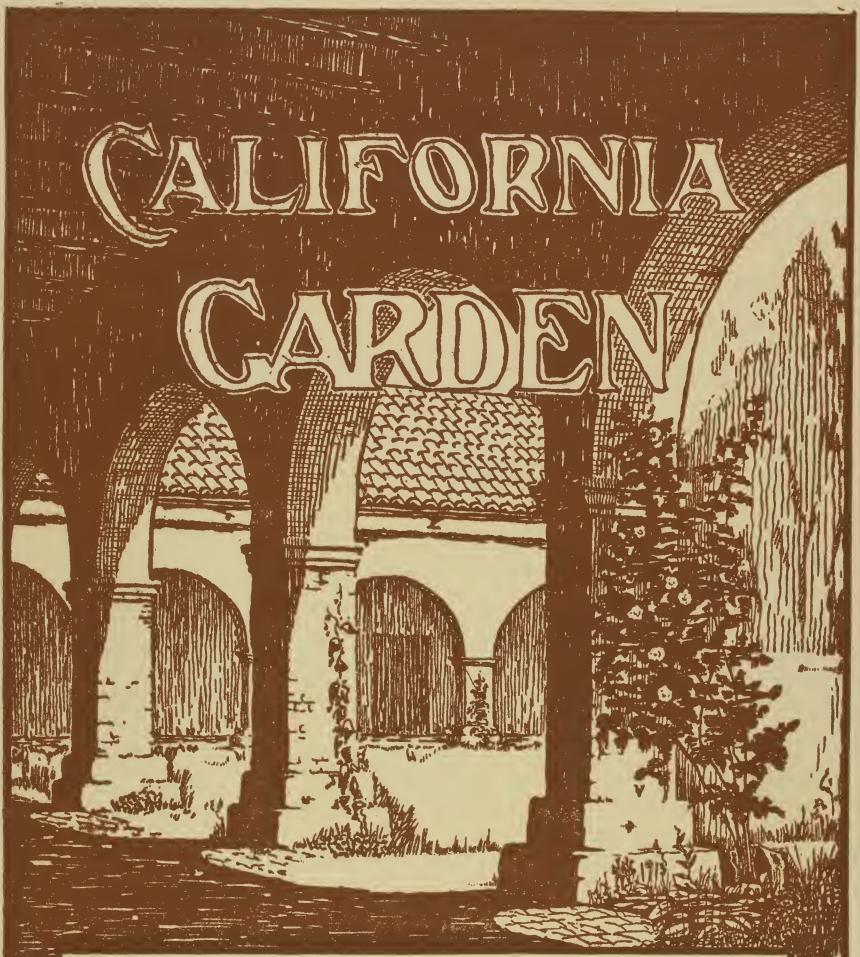
CALIFORNIA GARDEN



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The California Garden

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Tea Roses for the Southern California Sea Coast.

By Capt. Geo. C. Thomas, Jr.

The rosarian of our Southwest Riviera may grow most classes of roses to perfection, but there are certain types which give fine to superlative results, and others that, as a general rule, are not worth cultivation except for experimental collection purposes.

Nevertheless, soil, drainage, and special local conditions affect the problem in Southern California as elsewhere.

Our most important requirement is continuous or recurrent production, and roses which bloom but once, or but once and with very scattering flowers thereafter are inferior. However, we secure a second or an additional blooming period of sufficient importance in many varieties which usually give but one offering. Therefore we cannot eliminate roses because they are classed in other sections as "Spring bloomers only."

There are a number of Hybrid Perpetuals, a few Wichuraianas, and some others in one-season kinds which give us fine or reasonable production after their spring burst, but such varieties have been established and stand as known exceptions.

Let us therefore throw out everything which does not yield sufficient reward by generous gifts over a great part of our twelve month rose season.

On this basis we must turn to the groups which are known as ever-bloomers for most of our varieties. Our choice is a wide one. We have the Teas, Hybrid Teas, Pernetianas, and many combinations of these classes for dwarf roses, in addition to selections from Tea, Noisette, Hybrid Tea and Pernetiana Climbers, and must not forget the new Allister Clark Gigantea Hybrids of Australia. For a large collection one must include the best of all these possibilities, as well as the superlative of other types.

Hybrid Teas and Pernetiana introductions are reaching us in an unending stream of novelties, and many of these are of great value both for cutting and decorative uses and vie with the best of the same breeding already proved satisfactory.

Notwithstanding the great merit of many of these, a large number have bad faults. We find roses with diseased foliage, with leaves lost early, with weak necks, without perfume, and which do not last.

We overlook the Tea rose because it is difficult to secure; we cannot purchase well-known and extremely valuable dwarf Teas, Climbing Teas and Noisettes for the reason that most of these are not hardy and in consequence the nursery firms prefer to sell roses which they produce in great quantities and find a market for all over the country.

We cannot expect the commercial grower to produce a special class of roses for us as long as we buy all, or a majority of the other things he offers.

Incidentally, many of the varieties sold are very fine and we are prone to take the easy course and hope all offerings will be satisfactory. They are not!

Our logical answer to this situation is to buy the good Hybrid Teas, Pernetianas, etc.; but to create a demand for the best of the dwarf and climbing Teas so that our gardens may contain the most valuable diversification obtainable.

There are poor Teas just as there are poor Hybrid Teas, etc., but the best Teas should be planted alongside of the best Hybrid Teas and Pernetianas, otherwise we fail to obtain perfection.

The best Teas are vital; they must be included.

First of all, the superlative Teas have finer foliage than the Hybrid Teas or Pernetianas; it has less disease and it holds better over a long growing season.

The finest Teas give as good, or better production than Hybrid Teas or Pernetianas; they last splendidly, their growth is remarkable, and exhibition kinds furnish flowers of sufficient size. The climbing Teas and Noisettes are equally desirable.

It is not a question of saying "discard Hybrid Teas and Pernetianas in climbers and dwarfs and raise Teas instead," but it is necessary to grow the best of the Teas as well as the best of other classes; it is foolish to be satisfied with the inferior kinds of any division.

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Moreover, just as it is often advisable to grow one climbing Hybrid Tea instead of half a dozen dwarfs of the same sort, so it is wise to cultivate climbing Teas instead of the same dwarf kinds, always remembering that while many climbing sorts are uncertain as to growth, there are others which may be depended upon.

The Teas present a few wonderful specimens for cutting in the lighter shades. "W. R. Smith" and "Lady Plymouth" as light peach and light yellow are finer, to my mind, than any Hybrid Teas or Pernetianas grown, and must be included in every garden of the Southland which desires cut flowers of exceptional beauty and lasting. In red cutting roses the Teas may be considered inferior by some, although the Hybrid Teas, as everyone knows, are not entirely satisfactory. Yet if you place the best red Teas in competition with the best red Hybrid Teas, you will be surprised at the result from a cutting standpoint, and you will have flowers in great profusion and tenaciously held foliage without disease, but you will lose in perfume.

Personally, the writer perfers Teas to all other classes; he believes the climbing Teas give greater variety and finer production with less disease than the climbers of any other class for the Southern California Sea Coast. He holds the opinion that the best dwarf Teas are as important for cutting or decoration as the best of any other class for our zone.

It is his hope that the superlative Teas, dwarfs and climbers, will eventually come into their own and be grown throughout all southern climates, and that inferior roses of any type will be discarded.—San Diego Rosarian.

ROSES OF 1930

By John A. Armstrong

This column is only for those who are very much interested in roses—sufficiently interested to want to grow and see the blooms of some of the new kinds which have only been on the market for a year or two. I am giving below a list of the new roses which I consider should be in the garden of every one who loves roses and has room for a few more.

They are not untried, for some of you probably have several of them, and I have observed them all for from one to three years. I consider each one to be a distinct advance in the rose world.

The Ten Stars of 1930

Here they are, listed alphabetically because I am showing no favoritism.

Duchess of Athol—An exceedingly rich and intense shade of orange apricot, shaded scarlet and crimson. The flowers are short, and quite full, and not very graceful, but nobody can help liking the glowing intensity of its color.

Edith Nellie Perkins—Edith arrived from England last year and we like her very much indeed. She blooms to beat the band and her slender buds are salmon pink on the outside but a lovely blush pink on the inside which is just suited to a modest young English maiden. Even the plant is true to life, being hearty and robust.

Ivy May—Mme. Butterfly is one of my favorite roses, as it is of many other rose lovers, and Ivy May is evidently a close relative, with the same symmetry of form, not a petal out of place, and similar tints of cream, amber and pink—only a sparkling shade of pink predominates in this and it produces more flowers than Butterfly.

Margaret McGredy—You never have to nurse and pamper this rose, for it will grow twice as vigorously the first year as most roses and produces great quantities of its large, double, fragrant flowers of vivid brick-red. No slender shapely buds—just lots of luxuriant cedar-green foliage and plenty of color.

Marion Cran—The bush is not as strong as some and the flowers open and fade rather quickly, but nowhere else can you get a color combination like this—the buds being buttercup yellow, each petal edged with cerise, and the open flowers are a grand and glorious mixture of light red and yellow.

May Wettern—A bit formal, with stiff petals —also bi-colored—salmon pink and deep rose. The buds are large and the plant throws up many long, stiff shoots, each crowned with a perfect bud.

Mrs. Erskine Pembroke Thom—A mighty good yellow rose, in spite of its long name. Flowers not very large, but every one perfect, clear unshaded yellow, of the same shade as Claudius Pernet.

Patience—If you only plant one of this lot that I am describing here, let it be this one, particularly if you like perfectly formed buds for the table or your buttonhole. It should give you more perfect buds than you ever saw on one bush, and the color is new, too—a bright scarlet-carmine.

President Jac Smits—I believe Jac was a South African dignitary but if his characteristics were anything like this rose, he was a colorful old gentleman. Semi-double, on the order of K of K, and its crimson-scarlet, velvety sheen surpasses in brilliancy all other reds. Mildews a bit, but that should not stop anyone from growing it.

Talisman—We should all try this spectacular rose of scarlet, pink and gold, because, even though the flowers are not always perfect, a good one is an event, and you will want to show it to all the neighbors. Just about the most fragrant rose you ever held to your nose.

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FLORAL ASSOCIATION MEETING JANUARY 21, 1930

Rock Gardens

The January meeting of the Association was given over to rock gardens. There was an exchange of plants mostly sedums and crassulae. Mr. Paul Avery, a young garden enthusiast, gave a short talk on his trip to Europe followed by pictures of English gardens including many rock gardens and pools. There were also pictures of nature's rock gardens in the Alps. There are no more enthusiastic gardeners than the English in the world, yet we could do nothing worse than copy them in California where soil, climate conditions and traditions are diametrically opposed to theirs.

We of Southern California can grow such beautiful things suited to our alkali soil and long droughts that to try to grow things needing moist air and acid soil is worse than foolish.

Particularly in rock gardens should we be individual. They should abound in mesembryanthemums, sedums and crassulae, evergreen and disease-resistant rather than in Alpine things which bloom for awhile and look like weeds the rest of the year and run riot in most unseemly fashion.

Few of us have gardeners unless the man who comes in by the day and digs up our choicest new plant for a weed may by courtesy be called a gardener, and so we ought to have things that don't need eternal care and watering.

Succulents are the gifts of the gods to Californians and we ought to consider ourselves the blessed of the earth therefor and not throw away our heritage for a mess of pottage.

You can take your month's vacation in the dryest, hottest weather and find your succulents alive when you get back. And you won't find any more unique or beautiful flowers for your bouquet than some of the commonest aloes and crassulae.

Our Miss Sessions talked to us about the plants that had been brought in and if you get any more fun out of vaudeville than out of her talks you have a perverted sense of humor. The conscious worn humor of the hired performers is weeds beside the fresh, colorful, flowering of wit from our star who could talk about a clod and make it interesting.

Some of the plans she discussed were as follows: Ophropogum (beard grass), a lily-like thing with lovely sprays of blooms lending themselves to lovely bouquets and resolving into purple berries if left unpicked: Haberathemus, like a very full red fuchsia needing sharp cutting back as flowers come from new growth; Orange buddleia blooming in winter unlike its purple sister commonly called the Australian lilac. It is graceful but not smelling any too good. White buddleia, fragrant and drooping, also winter blooming. Tecoma smithii, a hybrid from T. capensis, yellow with red flushing, needs sharp pruning and responds with masses of beautiful flowers. Cassia-tomentosa, a small tree-like bush giving continuous yellow bloom if seed pods are kept cut off; Cassia artemisioides, delicately leaved like coarse lace, a lovely yellow flowering bush if kept cut back. Coronella, one of the few low growing plants we have with delicate yellow flowers and soft foliage; Streptosolen Jamesoni which rejoices in deep red yellow bells attracting lots of attention but with a bad habit of turning up its heels and expiring without notice. There was a lovely specimen of Erica Mediterranea, a heather with more tolerance for water than the African variety. There is a hybrid form of it, low growing and very beautiful. There was also a nice spray of Erica Melanthera, the African winter blooming heather which keeps so well after cut almost like an everlasting flower and it stands shipping well. It should be trimmed back after it is through blooming and kept dry all summer. There were two lovely escallonias, alba and langleyensis (pink) glossy of leaf, lovely of flower growing eight feet high and if kept trimmed enough will give lovely flowers continuously. Among the succulents were the following:

Crassula arborea which makes a small tree-like shrub. It is covered with a glory of pink bloom right now easy to root, easy to grow, without scale or disease, suitable for a hedge, suitable for street planting. As Miss Sessions says, "What more could you want?" Crassula purpurescens when given the sun is like clusters of huge green roses brown edged and full of huge yellow cones of bloom in winter, a good example of viviporous plants sending out new plants without seed. It has no scale or disease, no bad habits and needs no care. Aloe ciliaris, the climbing aloe, one with yellow blooms, the other with orange-red candle-like blooms, beautiful beyond expression and very well suited to Spanish houses.

Portulacaria Afra, a glossy fast growing succulent with small leaves. It is the only one of its genus and has no other species. It has an attraction for elephants and is commonly used for their food. I sent some to the circus last October by a customer to find out how the elephants would react but it poured down rain in the middle of the performance and the tent leaked and she could not get to the elephants.

There was a beautiful bilbergia, unique in its pink sheath with its navy blue margins on green petals.

Good coffee and cakes were served by the house committee.—N. K. B.

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FISH—LILIES—FUCHSIAS

By Mrs. W. S. Thomas

Have you cleaned your water pool? If the fish get busy before you do, all the spawn will be lost in the change of water.

A few months ago, some friends sent forth an S. O. S. to come and see what was wrong in their large pool—over a hundred nice fantails had just been discovered dead and dying.

"No, we didn't clean the pool this spring, the water seemed clear and good." But there were a dozen large boxes of water plants there, which had been giving back to the water all their rotting blooms and foliage, and in addition, the pool was partially surrounded by large bushes which had furnished another generous portion of decaying fallen leaves. Now count in also the fish food which the poor inmates could not possibly find if it once got into that soft greenish slime, several inches deep which we found in the bottom. This poison was slowly working on the fish, then weather conditions undoubtedly developed suddenly the acid condition which would cause any self-respecting fish to leave home.

Then again, some people will tell you they change the water once a month, but they also will soon be wondering why they have no spawn.

One of the old poets said,

"Be not the first by whom the new is tried
Nor yet the last to lay the old aside."

While this couplet referred to fashions, it is applicable to all things. Moderation is always desirable. It applies to replanting lily roots as well. If they have not multiplied and outgrown their root room, they will do two years without replanting, by adding a heavy top dressing of blood and bone, then sand. But personally I think they bloom better for a change of soil. Of course this refers to the hardy varieties, for the tropicals are such strong growers they need a full meal every spring and an extra one thrown in semi-occasionally.

If you are anxious to raise baby fish do not attempt to keep many fish at spawning season; the eggs and the newly hatched spawn have little chance against the cannibalistic appetites of their friends and relatives. Dispose of all but a few good specimens. Results will show you so much better quality, and increase in numbers, in your water family. A scrub fish takes as much care as a pedigreed one. And if you will remember to keep the mother fish well fed on chopped angle worms or scraped raw beef, the spawn will have much more vitality.

A La Jolla woman never feeds her fish anything but angleworms, and they are the most beautiful rich red color, and besides the added beauty, such food is almost a sure disease preventive, since it is their natural food and keeps them strong. But do not expect your fish to possess health, wealth, happiness (or children) if your pool is very small or too shallow. Last fall during that desert blast that enveloped us one evening for about an hour, several people lost every fish they had, big and little. In every case within my knowledge, the pool was shallow and the water heated quickly.

Fuchsias do not belong with fish, lilies and pools, except that they love water, but we cannot resist speaking of the members of the latest family admitted into Floral Society. The late rains have brought them into new growth; some are now full of buds, some of course are never without blooms any day of the year, but those which are summer bloomers have not yet gained enough courage to send out their showy dew drops. But all kinds need pruning now if they have not already received it, and perhaps a spray, to down possible Aphis or Thrips.

We have found seven new kinds since last month, that is, if they do not prove to be an old kind under a new name. But even if that eventually proves true, just think of all the joy one has in watching for that first bloom. Physiologists and such, long ago convinced all of us lower common mortals that anticipation far outweighs realization.

Anyhow, give fuchsias shade, water and fertilizer and they are always worthwhile, even if a new catalog has fooled us again. That has happened so often that we are like the old lady who remarked that the unexpected happened so often that she now expected it.

"Adiantum O'Brienii is that wonderful, strong growing maidenhair fern often seen massed in lathhouse beds. It grows from a creeping root stalk, with rather heavy stems, black in color. Ad. O'Brienii is very satisfactory planted in the shady corner of the lathhouse, either in the ground or in boxes. Its fronds, too, seem to enjoy joining the dainty bouquet, and do not wilt so quickly as most cut maidenhair likes to do. Also, the plant does not resent this shearing and rewards one with a quick new growth."—C. D. B.

AN ACROSTIC OF CALIFORNIA!

"Ceylon, with its air spice scented,
Arabian nights and their dreams,
Lebanon's cedars splendid,
Icebound Himalayan streams;
France with her rich wines flowing,
Ophir's mines of the metal pure,
Roman plains, and the Olive growing,
Nile, and the deserts lure;
Isles of the Blest, and the fair Arcady,—
All, State that we love, are blessed in thee."

—K. O. Sessions.

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The Feb. and Mar. Gardens

By Walter Birch

The prolonged dry weather and discouraging planting conditions of the late fall and early winter had almost put a stop to garden operations, when all of a sudden we had our wonderful rains, succeeded by springlike temperatures at this writing, making us realize that we must now really bestir ourselves in order to catch up with the delayed work of the garden.

The Dahlia season is fast approaching, and with the increasing tendency to rush various seeds, plants and bulbs into the ground rather ahead of good planting time, it is well to prepare the soil in good season, particularly when it is necessary or advisable to use coarse animal manure.

For your Dahlia bed choose a sunny open location and apply a good dose of well rotted barnyard manure, spading it in to a good depth leaving a rough surface. In a month or six weeks spade ground again and it will then be in better condition to plant your tubers.

The same treatment applied now to the ground you are going to use for your Chrysanthemum bed will also be very helpful at planting time.

Raising Dahlias from seed is attracting more attention every year, and judging by the wonderful seedling Dahlia blooms one sees nowa-days, it is not surprising. Make your selection of good dahlia seed now and try your hand at this fascinating method of Dahlia growing, and you will be astonished by the size and quality of the blooms you will raise.

With the rising temperature it is time to think of setting out tuberous begonia bulbs. They call for shallow planting in well drained soil of light texture and plenty of humus. Leaf mold or peat well mixed with the soil and shady or lathhouse conditions are favorable to these beautiful flowers. The hollow side is the top of the bulb and when planting just barely cover using a little sand next the bulb. These beautiful flowers are often of great size and come in many shades of red, copper, pink, yellow, etc., and their blooming season lasts for several months.

February is a good month to begin planting your gladioli bulbs, repeating the process every month until midsummer. Plant in any good garden soil in a sunny location, using a fair amount of animal fertilizer supplemented later on by occasional applications of bone meal, keeping ground in a moist condition and well cultivated. These bulbs should be planted to an average depth of about five inches, and there are dozens of beautiful varieties to select from.

For a background try a few cannas, plant shallow, manure heavily and water copiously and you will have a wonderful show of tall spikes of flowers in colors of red, orange, pink, etc., that will bloom the greater part of the year.

There is ample time yet to plant some more ranunculus bulbs in a semi-shady location and have another crop of these attractive flowers during the early summer.

Plant in open ground seeds of African Daisy, Calendula, Centaurea, Clarkia, Larkspur, Lupins, Phlox, Salpiglossis, Schizanthus, Scabiosa and Sweet Peas, and in flats Asters, Delphinium, Gaillardia, Geum, Pentstemon, Salvia and many others.

THE WISTER LECTURE

On March 4th at eight p. m., Mr. John C. Wister will lecture at the Wednesday Club House under the auspices of the San Diego Floral Association. His subject will be "Gardens," and his coming to San Diego offers a rare treat to lovers of flowers and gardens in our city, which should include all of us.

It will be recalled that Mr. Wister lectured here some seven years ago and when it was learned that he was to come to the Pacific Coast, arrangements were made for a return lecture.

Mr. Wister is a national figure and a man of international reputation. In the minds of a great many people his name is associated with the culture of the iris, as he was one of the incorporators of the National Society and its first president. However, he is almost as well known in other fields of plant culture and his lecture should make a general appeal. His best known lectures have been on "Roses," "The Iris," and "European Gardens," and his San Diego lecture will combine parts of all three and will be profusely illustrated.

Tickets at popular prices are now obtainable at Harris Seed Company and Dunning and Millar stores.

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The California Garden

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EDITORIAL

New Editor—It is with a mingled feeling of pride and responsibility that we aspire to the editing of this very successful horticultural publication. Pride of association with an organization that reflects eighteen years of useful service to the garden loving public of this state. The "California Garden" has become an institution in California and recognition of its value is best evidenced by a wide circulation throughout this country as well as many foreign lands. The responsibility of this magazine's continued popularity and usefulness weighs heavily on our mind. In a broader sense however, the "California Garden's" very talented, learned and loyal contributors insure success, particularly since we are not denied the guiding genius of the editor's worthy predecessors, Alfred D. Robinson and R. R. McLean, both of whom so efficiently directed its publication. May we with modesty add that we consider the "California Garden" the most valuable publication of its kind in the western states and our earnest ambition is to continue the high standard it has already attained.

Bulb Flowers Now Blooming Along Coast—How many local subscribers have visited the colorful bulb fields in this county at the heighth of their glory. The masses of daffodils, bulbous iris, freesias, anemones, ranunculus and other spring blooming bulb flowers will soon be in full bloom. The fragrance of large blocks of freesias in bloom pervades the countryside, while picturesquely nestled here and there may be seen blocks of various hued flowers vieing with each other in gala array. Bulbous flowers are grown commercially in many parts of the county but perhaps the most conveniently grouped plantings may be seen in the vicinity of Solana Beach, Encinitas and Carlsbad, North Carlsbad and Oceanside. It will be necessary to drive back from the main highway a half mile or more, especially in the Carlsbad section to see the greater number of plantings. No flower lovers should deny themselves this delight.

"Trees and Shrubs of Golden Gate Park" listed in this issue is reprinted in the hope that it may be of benefit as a reference file for our subscribers. This list is deemed particularly valuable in that many rare and unusual trees and shrubs are listed and that its correctness is made manifest by reason of the caliber of the compiler, Eric Walther, well and favorably known to the readers of "California Garden." It is suggested that amateur botanists and garden lovers carry this list for reference in the event of their visiting this wonderful park at some future date. Undoubtedly many of these little known trees and shrubs would prove valuable additions to our gardens. It is possible that seeds of some of these sorts may be obtained through the park, or at least information where they may be obtained.

COREOPSIS GRANDIFLORA SUPERBA

For the flower garden this is certainly one of the neatest and most elegant of hardy plants now in bloom. The plant is worth more than passing notice, for it is rarely we find such profuse flowering in combination with so acceptable a color. Its remarkable freedom of flowering renders it specially suitable for large beds, and well grown in such its blossoms—a beautiful shade of clear yellow—may any day be counted by the hundred. In this way a profusion of its handsome blossoms is kept up for weeks together. For vase decoration the thin, wiry stems are excellent in every way, and little wonder the plant finds such favor with the florist generally.—In Gardening Illustrated.

STRAY THOUGHTS

By P. D. Barnhart

I am beginning to wonder whether the idea of a natural method of propagating, and planting trees grown from seed, will ever penetrate the mind of professional and amateur gardeners. Certainly no evidence of such system appears in all the nurseries and the extensive landscape plantings in all this Southland. Propagators plod along in the same paths the fathers trod ever since I can remember. Plant the seeds in "flats," and when the little plants have about four leaves, into pots or tin cans they go, and there remain until sold. Meantime the root system twists and curves around the sides of the container, until the tap root has the appearance of a corkscrew, and then what happens when the poor plant is set out either as an Ornamental or an Economic subject. The "corkscrew" remains, lateral roots start out into the soil surrounding, seldom if even become strong enough to support the tree when the tempests rage with fury around the top. Over the subject goes, then in desperation the worried gardener resorts to guy wires fastened to stakes. Even so, the root system thus formed will not supply sap; life is a better word for the idea in mind—to a well developed top and the poor thing gives up the struggle for existence. The sequel to such errors in growing trees and plants is about as follows. If the homemaker does his own work, he looks upon the dead tree or shrub with a feeling of despair, and wonders whether the game of gardening is worth playing. It is not the cost of the game, that doesn't bother him, but the failure robs him of enthusiasm, and he quits with a broken heart.

Again if the homeowner cultivates plants by proxy; that is hires the work done, and strolls in the garden in the cool of the the evening, or the morning and sees all this death as it stalks among the specimens of the garden, nine times out of ten he lays the trouble to the ignorance, or the carelessness of the Superintendent. God alone knows the weight of the burden many a Gardener has to carry, all because of this erroneous system of plant propagation.

The question will naturally arise in the mind of the thoughtful reader, "what is the natural method?" Now then, let us get down to the fundamentals. Oh, that word "fundamental" how it has been worked during the past decade —by theologian high brows. Here is the basic principle on which must be built successful Forestration, whether on a large or small scale. One tree, two trees or a thousand, the idea is the same. Plant the seed where the tree is to remain, take as good care of the seedling as is necessary to a successful transplant from a pot or a can, and be assured, in five years the seedling will be as large, or even larger than the potted subject. Moreover, the tap root will have gone deeply into the subsoil and anchor the subject so firmly that no matter how fiercely it may be assailed by a storm, it will remain steadfast and sure.

The root of a seedling tree if not interrupted in its growth, is usually from four to eight times the length of the top when one year old. If not practicable to plant the seed where the subject is to remain, then plant it in a paper pot, not less than two feet long, four inches square, and plant it out promptly when one year old, pot and all. Furthermore, transplanting a one-year-old seedling is sure to break the cambium. Now the cambium of a tree, bears the same relation to it, as the epidermus does to animal life. Any well informed person knows that when the epidermus is broken, infection is sure to set in; the virulence in proportion to the physical condition of the subject. Most of the diseases and the evils attendant upon the cultivation of plant life are due to the injury of the cambium. No doubt about that in the mind of this writer. Years—fifty of them—of experience and experiment and observation, confirms him in this conclusion.

FEBRUARY WEATHER IN SAN DIEGO

By Dean Blake

February occasionally passes without precipitation, but as it is in the heart of the rainy season, rain may be expected quite frequently. As a rule the storms move rapidly and clearing weather follows quickly, so that between storms clear, bright weather usually prevails.

Cool, frosty mornings are common, but dangerously low temperatures seldom occur even in the citrus districts back from the coast. Sunshine is plentiful for all purposes, and as the days are growing longer, the temperature is gradually increasing.

Although sometimes a stormy month, gales are rare, and there has never been a wind greater than 37 miles per hour. Temperatures below 40 occur twice during the month on the average, and many days have a maximum above 70 degrees.

NEW MEMBERS AND SUBSCRIBERS FOR FEBRUARY

Miss Clara A. Barrows, San Diego.
W. W. Stockton, San Diego.
K. Parmentier, San Diego.
Mrs. W. E. Baldwin, San Diego.
Mrs. J. F. McKitrick, Encinitas.
Leon Israel, New York City.
Mrs. Maude Jamison, Glendora.
Shoreacres Country Club, Rosarita Beach, Lower California.
Mrs. George Gray, Esparto, Calif.
Captain C. H. Reynolds, Mt. Clemens, Mich.

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LILIES FOR THE AMATEUR

To Plant Now

To be successful in the cultivation of Lilies it is necessary to provide them with deep, moist compost and shade from the mid-day sun. They should have good drainage, yet not become parched during periods of drought. When buying the bulbs, select firm specimens in preference to large loose ones and take care of them until planting time arrives by laying them out singly in shallow trays with a covering of leaf-mould, otherwise they are apt to shrivel.

Some kinds, such as Martagon, croceum, and tigrinum may be planted in beds of ordinary rich soil in the herbaceous border. whilst speciosum and auratum will do much better if among low-growing shrubs, such as Heaths, Azaleas, etc., where their roots will be kept shaded and moist during the hottest summer days. An interesting plant for a very shaded spot is Lilium giganteum which produces massive white trumpet flowers on stout stalks which often reach 10 feet in height. For all Lilies the soil should be deeply worked and if there is any possibility of its becoming waterlogged in winter a layer of broken bricks must be placed about 2½ feet below the surface.

Lilies Do Not Like Lime

Lilies do not like lime, so if your soil is inclined to be calcareous, liberal quantities of leaf-mould should be incorporated when preparing the site. In fact, leaf-mould is almost indispensable for the successful cultivation of these plants whereas manure in any form in contact with the roots is detrimental and liable to cause them to become infected with disease. The depth of planting varies according to the size of the bulbs. Small bulbs are placed about four inches deep, whilst the largest ones must be at least six inches below the surface.

Before planting, dust the bulbs with flowers of sulphur; it will also assist in warding off damp, disease, and slugs if they are enveloped in sand, after being placed in position. Then fill in the holes and mark their position, after which it is advisable to mulch them with bracken or straw, and as soon as the shoots have pushed above ground to supplement this with a layer of well decayed manure.

During July, which is the month of Lilies, such sorts as Hansoni, croceum, Martagon and pardalinum will be in flower, and these will be followed by auratum, speciosum, tigrinum and sulphureum, which will extend the blooming period well into September. As soon as the flower stems have died down, the winter mulch should be applied and the plants left undisturbed for several years. When growth becomes poor, however, they should be lifted, the soil enriched and the best bulbs replanted, whilst the smaller ones can be planted into a nursery bed, when in a few years they will develop into flowering bulbs. An interesting method of propagating bulbs is by detaching the scales and dibbling them into pure sand, when small bulbils will quickly form at their bases.—G. F. Gardiner in Popular Gardening.

THE GARDEN CONTEST

A committee consisting of the following members of the Floral Association is developing plans for the coming garden contest:
Mr. Paul V. Tuttle, Chairman.
Mrs. John Burnham.
Mr. Milton P. Sessions.

The committees which acted for the Association during the last year did a great deal of pioneer work and have furnished the new committee with the records of last year. It has been able also to recommend certain changes which experience indicated were much needed. It is probable that the efforts of all concerned will result in the simplification of the work to the benefit of the exhibitors as well as the judges. To those interested this will appeal as a move in the right direction. There is no reason why we should slavishly follow precedent if the local conditions point a more logical way of handling the contest. At any rate, succeeding committees will have the experience of their predecessors to guide them and we will eventually evolve a suitable set of contest rules adapted to floral problems in San Diego.

It is hoped that there will be more entries this year than last and it is estimated that there will be at least one hundred and fifty contestants in the three sizes of gardens. There will be special awards for the distinctive garden features as was the case last year: best lawn, best rock garden, best cactus garden, etc., in addition to the regular awards for best garden.

Entry blanks may be had by applying to committee members or at Harris Seed Company and Dunning and Millar stores.

CLINGING VINE

In the war among themselves not always the stronger plant wins. The ingenious weaker one succeeds with delicate but persistent way to climb right over the aggressive one. The morning glory is a common example of this and lifts its ambitious flowers up to the sunlight at the expense of all its neighbors. It not only uses, but often kills other plants in its way. If one plant cannot successfully thrive in a certain region, another sort proceeds to drive it out.

Nut trees are especially clever in their color of foliage and nuts. During time of development, nuts are green and more or less undiscernible. Ripening, they change to dark brown, the color of the ground on which they expect to rest.—C. D. B.

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LATH HOUSE MATTERS

By Alfred D. Robinson

As you will see in other places in this number of California Garden I have ceased to be its Editor, for the last time I hope and believe. This enables me to tackle the monthly lathhouse effusion with a feeling of irresponsibility that I have sadly missed while Editor. If I started to write as Editor the typewriter functioned for a lathhouse article and vice versa. Just today I was held up on the public highway and threatened with a letter criticizing my stand in the last number in the matter of lawns and I still feel the glow that came over me as I countered with "I am no longer Editor." This does not mean that I hold lightly the honor of being Editor of California Garden for I expect to place my occupancy of that Chair in a conspicuous place on my application for a pass through the Pearly Gates. My successor, Mr. Osborne, is not only by personal ability well fitted for the place but he has had and will have, because of his connection with the Horticultural Commission, exceptional opportunities to gather interesting material and meet those who can contribute it. I expect to work hard under him.

The marvellous weather, following the rains of January have brought to Rosecroft quite a few out of town visitors and the majority of them have come to see the marvellous tuberous Begonias. Most of them illustrate size by making as big an opening between their first fingers and thumbs spread as nature will allow. I claim to have a better looking lathhouse than I have ever had at this season but of course there are no tuberous Begonias and lacking them all else is desert fruit. My sorest trial comes from my former visitors who bring their friends to see and marvel at the tuberous and finding them not, spend the remaining time of the visit describing what they saw when they were there and entirely prevent any enjoyment of what there is to be seen. After one of these ordeals I go to my seeds which are coming along encouragingly but not mechanically, if I may use that expression. None of them sprouted as quickly as last year, possibly because I have the boxes raised off the wet sand an inch or so and this I think all to the good. My florists' paper tells me that many Eastern growers are substituting frames for greenhouse treatment in starting seedlings of various kinds, finding an added vigor more than compensating for a slight loss of time. In just two weeks the double tuberous sprouted in these colors, yellow, scarlet, crimson and pink closely followed by orange, light pink and in a week dark red, last of all the white. The Lloydii duplicated, except dark red did not take so long. To my surprise the species Pearcei, the small single yellow, took over a month. Rex and many other fibrous kinds planted a month have not yet shown. This seed is under very favorable conditions of soil, heat and moisture and good fresh stock. The main object in going into this detail is to stress the handicap of planting mixed seed. There are many calls for seed of all vareties of Begonias mixed, but the utter lack of uniformity in germination and development of the different kinds, and even colors, as I have sought to show makes such a mixture very unsatisfactory, if not worse. Rex Begonia seed is almost always sold in mixture but if there be any considerable number of varieties represented in the mixture germination will be unbelievably various and drawn out, in one sowing I made, seed continued to sprout over a period of a whole season. This seed seldom gets under way for six weeks and grows very slowly. I should add that is my experience, as I read in the catalogues that nice plants can be grown from seed in five months.

I have borrowed from a good and wealthier friend the latest addition of Bailey's Encyclopedia which bears date of 1927, mine appears to be 1906, and I find that the Begonia section therein has been very appreciably brought up to date, both in reading matter and illustration. It even includes a TREE section credited to Mrs. Theodosia Shepherd, which should please the Pacific Begonia fans, I know I am gratified. Among the additions is the Luxurians a report of which Miss Sessions brought back from her European trip, and a plant of which was obtained through the courtesy of Mr. John McLaren. This is proving with us a very hardy vigorous species, though ascribed to South America it grows happily with only a lathhouse protection, but it is not for the low house, making eight to ten feet in a year. In 1928 it made seed that sprouted well, but after six months from planting and the seedlings have thriven. This year it flowered but made no seed. It is quite individual but worthwhile for foliage only. Cathayana is in there, too, and this is a beauty from China

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with marvellous velvet leaves made for dress protectors. It grows upright and branches and is said to cross with the Rex. I hope nothing will happen to my one little specimen and that it blooms. I had hoped to find the history of the Begonia we call Coralline Lucerne, Bailey has it as Lucerna but its origin is dismissed as being named for Lucerne where it originated, whence the Coralline? There are many other fascinating items to be picked from these pages but why not read them for yourselves.

This warm sun will be making you ache to do things in your lathhouse but it is to be hoped that there is more disagreeable weather ahead and it is not time to move Begonias around or make cuttings. You can start to go over your house cutting out dead and old wood, cleaning up the ground space and adding a top dressing. For good results this dressing must have plant food, a certain bulk, and solidity. Straight leaf mold, such as is offered from our mountains, is too loose, its value for Begonias it is true, lies in this looseness and its acidity but it wants the addition of a heavy loam or sand to compact it and some form of plant food. Cow manure layered in a bin with loam for a few months and then mixed with leaf mold, some sand, charcoal and bone dust is just the thing. Exact proportions are not essential but a good mixture would be leaf mold four parts, manure compost four parts, sand two, with a liberal sprinkling of charcoal and bone dust. This can be put on two to three inches thick for remember Begonias root up.

Don't let this great rain be wasted by letting your lathhouse dry out and always keep in mind the biggest rain is only one watering to things in pots and boxes.

ROAD-RUNNER BIRD UNCHANGED SINCE PLEISTOCENE AGE

BERKELEY, Feb 15.—A careful comparison of the bones of living species of the long-legged road-runner with those of similar birds found in the Pleistocene tar beds of Rancho La Brea, Los Angeles, just completed by a graduate student of the University of California, reveals that these feather folk of the southwestern United States have resisted evolutionary tendencies and remained practically unchanged since Pleistocene time, perhaps 100,000 years ago.

The study was made by Leigh Marian Larson from specimens furnished by the University of California Museum of Vertebrate Zoology and by Dr. Loye Miller, professor of biology at the University of California at Los Angeles.

In explanation of the problem presented by the road-runner, Larson says: "It may be assumed that the modern road-runner is the result of a marked change from the remote common cuckoo ancestry by gradually increasing leg development with a corresponding reduction of the wing elements. Although Pleistocene is relatively close to us geologically, there have been faunal changes since then, and in some instances, it is judged by some students, evolutionary changes. The bird branch of the theoretical evolutionary tree was the latest group to separate from the reptilian stock, and so the evolutionary history of birds is comparatively late. A degree of change since Pleistocene might therefore be a logical presumption, and it has been proffered in some instances.

"With reference to the road-runner, then, certain questions come to mind: First, whether the Pleistocene road-runner had more powerful and therefore more useful wings, and less developed legs, than the road-runner of the present time? Second, has the road-runner carried on further development since Pleistocene, or has it been a perfectly stable form for some one hundred thousand years?"

In answer to these questions Larson says that, "The indications are that the evolution the road-runner has undergone must have taken place altogether previous to the latter half of the Pleistocene. Since, by some estimates, the Rancho La Brea deposits containing the road-runner remains studied were formed some 100,000 years ago, we may infer the evolutionary process in the case of this bird to have been an exceedingly slow one, in terms of years. The road-runner has not appreciably changed in its structure since middle Pleistocene time. There are no indications of any evolutionary trends, but all the implications are that the road-runner had already become closely adapted to its environment, perhaps nearly or quite as far as it is likely to go under the present circumstances."

"One of the catalogue ads which has continued to stir us up, is for 'Bristol Fairy' Gypsophila. This Baby's Breath is said to be double flowered, much larger than other perennial sorts, and grows several feet high, delighting one with its cut-and-come-again habit. So far, we have only seen grafted plants offered and these at seemingly high price. At this writing we are expectantly scanning the horizon for some plants of it ordered from the North. Incidentally, Oregon appears to be the nearest to home where they may be procured—this, after several inquiries to the larger California nurseries.

"Does anyone know the origin of this quite new Gypsophila and have any of our home gardeners already tried it out?"—C. D. B.

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GARDEN PROBLEMS

By Walter S. Merrill

THE CATALOGUES HAVE COME

In all parts of the world it is the season for consulting those most fascinating of books—the seed catalogues. In the East, icebound and drear, the glowing descriptions of what we may expect in our gardens next summer brighten many a long evening. Lists are made ready, and flower beds planned and visualized. The many disappointments of past years are forgotten, and we see our borders ablaze with color, and our beds spread out like Turkey carpets. The young man's fancy may lightly turn to other things; but the rest of us turn solemnly to the perusal of those aforementioned catalogues. Shall we confine our horticultural efforts to those familiar varieties which we have planted with such uncertain success in the past? Or shall we try a few packets of such fascinating novelties as our particular seedsman sees fit to offer us? To the enthusiastic gardener there is but one possible answer.

I have my favorite catalogue before me now—illustrated in natural colors! Double godetias are most fascinating in color and form. Of course, the common single varieties have always grown tall and spindly in this soil, and fall over at a mere puff of wind. I am very fond of dianthus—cheery little flowers—and the types are cheerier than ever, but the book does not tell how scraggy and unkempt a dianthus border can be. I am a bit doubtful about venidium fastuosum,—I suspect that it is nothing more than a long-stemmed orange gazania; but there is always a chance that it may be fine enough to warrant the whole page given to it in the catalogue.

I have a weakness for primulas of all kinds; but they are so hard to grow from seed. I plant many packets and get only here and there a weak little plant that seems ever on the point of "damping off". Last year five new shades of primula malecoides came to nothing,—not one plant bloomed. Yet the volunteers from the old plants have been innumerable, to be counted by the thousand. They come up in the beds and in the lippia paths as thick as new-sown lawn. They even germinate on the brick walks. I have tried primula sinensis (single and double), primula stellata, obconica, beesiana, kewensis, sikkimensis and veitchii, all with no results at all commensurable with those which the seedsman suggests as probable. About fifty plants of primula obconica are now making desperate efforts to bloom while still in thumb-pots, not an inch tall. If they are allowed to bloom they will have no vitality left for growing. If I pinch out the buds they will die. But they are interesting just the same.

I have never had any luck with schizanthus, but I have seen them in other gardens flourishing wonderfully, with the wrong soil and with little care. I must try some again. Three years ago I had a marvellous bed of didiscus coeruleus, "The Blue Lace Flower," but have not been able to achieve one plant since. Shirley Poppies never germinate for me here; but in Massachusetts we had them every year with no trouble at all. But now I have some thrifty small plants of Oriental Poppies, in pots, ("blush white to orange and deep ruby"), and live in hope of seeing them bloom, despite the pessimistic remarks of friends who have tried them. And meconopsis bailyi! Have you seen the picture? Not even the sad reports of such experts as Mr. Dunning, Miss Sessions and Mr. Robinson can prevent my giving it a tryout. Just think of a sky-blue matilija poppy,—and blame me if you can.

My shady corners are filled with pinks and mauves, so I have no room for experimenting with wallflowers, ("Cloth of Gold," "Fire King," "Giant Blood Red"). But I do hate to turn the page without a tribute to their gorgeousness. It is even difficult to pass by the page of nasturtiums,—sold in separate colors, mind you,—however well I know the pest they would become.

We must have nemesia, of course, and it is fairly easy to grow. Of course, even it may disappoint at times. The rather insipid "blue" may germinate one hundred per cent, while "cherry-red" fails to yield even one lone plant. But, whatever the color, there is nothing finer for our borders. Sweet William, too, should go on every list, and the new pink and salmon shades are lovely. Stocks generally do well in Southern California, and are finer every year. This year, however, my little plants are dying off, a few each day. No one seems able to tell me what the trouble is.

Most people like asters. Personally, I get little thrill from the pages devoted to them. That is, until I reach the paragraphs describing the singles. And then I fall. For I rank single asters and pyrethrums high in the list of the very most desirable herbaceous plants. Naturally, they are difficult to grow; or perhaps they would not seem so lovely.

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But it is a fine adventure each year, this catalogue hunting and the consequent attempts to grow herbaceous plants from seed, in a climate not particularly well suited to it. For there is always at least a little bit of success, enough to keep the spark of interest alight until another planting season comes along. So go to your catalogues and make your lists. Otherwise you will spend your time and money on something far more foolish. But, whatever you do, **Plant your seeds in seed-boxes and not in the open ground.**

NATIVE PLANTS IN GARDEN GROUPS

By Fidella G. Woodcock
Curator of Plants, Natural History Museum

COSMOPOLITAN PLANTS

In the study of plant distribution from a physical basis, geography shows us that equal lines of heat joining points on the earth's surface at different altitudes and often in very different latitudes, produce the same specie, often with modification.

Among our native American genera the common Maiden Hair Fern **Adiantum pedatum** "Five Finger" and kindred species of Adiantum are found in cool wet places, at the sea level in the north and in cool protected places of the mountains of the south. Of the ferns this is but an example of what may be called cosmopolitan plants, that grow under either similar or the same conditions of temperature all over the world.

Among flowering plants **Lobelia cardinalis** the perennial Cardinal Flower is by far the most striking of the hardy wild flowers under cultivation in the United States but takes the form of **Lobelia fulgens** in Mexico, the flowers being a deeper, richer red, and the foliage in horticulture is often tinged with bronze or variously spotted, the flowers subtended by showy bracts as are many of the Salvias, the Bougainvillea, and the Poinsettia.

Under the trade name of **Lobelia cardinalis,** var. **Atrosanguinea** (very dark red) this most desirable plant is cultivated. The most beautiful form of it referred to **L. cardinalis** is the "Queen Victoria" that we find in the Montezuma Garden of Balboa Park and on the inner parking of the drive near it. This magnificent specimen was raised in Vancouver, B. C., and presented to Superintendent John H. Morley by a friend by whom it was cultivated in the far north. The wild cardinal flower flourishes as a hardy native perennial in Alaska and Saskatchewan. The most northern variety is yellow, but there are pinks and reds, purples, and shades with a tinge of yellow.

The half hardy species all run in the red colors and are southern natives or hybrids. They are generally tall plants, much resembling in features the Campanulaceae or Bell Flower family. The corolla in Lobelia is tubular with five divisions or lobes, three on the lower side forming a lip, and two above, one on either side of a split through which the stamens arranged in a tube, protrude into the corolla, adding a good deal to mass color effect of the planting. In the evolution of plants the splitting of leaves or flowers show that they are of primitive origin; reduction into a whole leaf or flower shows advance.

There is much to be said of the Lobelias as the family is one of the oldest wild flowers in existence. It has been cultivated as a garden subject in the Old World being a half hardy subject through the Mexican **Lobelia fulgens,** very popular in Europe. In America it is known mostly as a conservatory or pot plant on account of its sub-tropical origin.

The annual Lobelias are mostly blue or white flowered, native of the South Sea Islands and South Africa. Generally slender and graceful they are attractive in borders, the diffuse flowers mingling with other colors. Many of the annuals are creeping plants not only for edgings but for hanging baskets, in white, blue, rose color, marbled, often with white eye and carmine spots. These run under the name of **Lobelia Erinus** with a large number of variations, in habit, in color, in color of foliage, besides in name.

The California Cardinal Flower is in most of its parts, distinct from the other cardinals. It is known as **Lobelia splendens** from its brilliant contrasting flower with the narrow-leaved foliage. Always found in nature by running waters in mountain districts, it shows a preference for cooler higher lands or exposures. In gardens when planted with other plants it is likely to take the water from their roots. Its own rooting system is shallow and spreading. Being rangy it is given to absorbing an unlimited amount of the good of the soil but if near an overflow or where there is seepage from the lawn grass it is strikingly attractive as it often grows quite tall. But it should be planted sparingly on account of its spreading netted roots.

Winter blooming shrubs in San Diego according to the isothermal lines of temperature that surround the earth clearly have their flowering time at the same time as the types of the type locality. Of these Jasminum primulum and Primula obconica have their home towns in the mountains of China and bloom at the same time as ours. **Abelia grandiflora** of South Africa and Acacia Baileyana of Australia although not natives of California, bloom at the same time as in their native homes, and are good winter bloomers. The Japanese Pittosporums are in the U. S. and in other countries in line with those of Japan.

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A map of these sites and situations where flowers grow is one of the interesting features of floriculture and when followed adds much to the development in the arboretums and botanical gardens.

TAN OAK

At a recent meeting of Beverly Hills Horticultural Society a specimen of this evergreen was exhibited for identification. It was so beautiful, and appealed to this writer so strongly that he looked it up in Jepson who gives it the generic name: Lithocarpus. Furthermore, leaves were sent to Albert Etter, a plant breeder, residing in the northern part of the state for further information. He says it grows abundantly in this part of the state, then he asks the question: "Are you acquainted with the Golden Cup Live Oak? I consider it the finest Live Oak of all."

The acorns of both species mature the second year, the foliage is not shed for two or three years.

Here is the thought we have in mind for the consideration of readers of this Journal, resident on this coast, even in this Southland.

Get in touch with Mr. Etter at once and place an order for the acorns. When received plant them at once in the location where they are to grow, or if not convenient, plant in paper pots and grow them one year only in this receptacle, then plant pot and all where the trees are to remain.

The name of the Golden Cup species is Quercus chrysolepis. Certainly these natives are quite as beautiful as any exotic broad leaved evergreen tree we grow. Of the Golden Cup, Mr. Etter says: "Unlike the Tan Bark acorn, everything likes them so well, one has to be on his guard to get there first, or they are all eaten up." Saunders in his Useful Wild Plants refers to this species as food for the Indians.

PETER D. BARNHART.

ISLAND BUILDERS

After volcanic rocks rising in the ocean, drifting seaweed, seashells, etc., have started an island, the sand-binding grasses finish the job. In time, a fertile land is formed and gradually a habitable island is the result. Many small trees and shrubs are also engaged in this binding work.

Along the western coast of the United States grows a yellow lupin whose long rope-like roots bind the drifting sands tightly together. This lupin is usually one of the first settlers on a new land. Small grasses which appear to be only two or three feet high, are in reality growing 40 to 50 feet below the earth.

—C. D. B.

THE ADDICT (After Moore)

The time I've spent pursuing
Voracious bugs and strewing
The yard with seeds
And pulling weeds
Has been my mind's undoing.

Each green thing lures the rabbit
Unless the chickens grab it;
I toil in vain,
Then try again—
I've got the garden habit.

CORIRNE ROCKWELL SWAIN.

FUCHSIA

The Fuchsia is a native of Chili, and was named after Leonard Fuchs, a noted German botanist. Its florigraphical meaning is "taste". The story of its English introduction is interesting.

A Mr. Lee, an old nurseryman near London, heard of a wonderful new plant owned by the wife of a sailor in a neighboring town. He posthasted to this location and offered the lady about eight guineas for her treasure. She finally agreed to the sale, and the old gardener triumphantly bore the new plant to his home. Whereupon he immediately used all his skill to quickly make as many propagations as possible. Luck was with him. By the next flowering season he had 300 fine fuchsia plants for sale, and owning to their novelty was able to clean up a neat 300 guineas on the transaction, besides much prestige.—C. D. B.

UNITED STATES CIVIL SERVICE EXAMINATION

The United States Civil Service Commission announces the following open competitive examination:

JUNIOR ENTOMOLOGIST

Applications for junior entomologist must be on file with the Civil Service Commission at Washington, D. C., not later than March 25.

The examination is to fill vacancies in the Bureau of Entomology, Department of Agriculture, for duty in Washington, D. C., or in the field.

The entrance salary ranges from $2,000 to $2,500 a year.

The optional subjects are (A) insect habits and development, (B) insecticides and physiology, (C) cultural control, and (D) taxonomy.

Competitors will be rated on general questions on entomology, practical questions on the optional subject selected, and on a thesis.

Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the Secretary of the United States Civil Service Board of Examiners at the post office or custom house in any city.

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IRIS EXHIBITIONS

Plans are being developed for an Iris exhibit as a part of the Spring show of the San Diego Floral Association.

For exhibition purposes German Iris will be classified according to color and the following classifications are offered to assist prospective exhibitors in planning their entries. Please note that this chart is not exclusive, being based on varieties seen by the writer in this vicinity and any others eligible in color will be placed accordingly.

A ribbon awarded for the best single specimen will carry with it 3 points and second best specimen receives 1 point, towards the sweepstakes award. For other entries first, second, and third ribbon carry 5, 3 and 1 point toward the sweepstake trophy respectively.

Awards

Sweepstakes

Trophies for first and second place.

Class

1. Collection of 20 or more varieties of German Iris.
2. Collection of 10 or more varieties of German Iris.
3. Collection of 5 varieties of German Iris.
4. Collection of 3 varieties of German Iris.
5. Best specimen stalk of any pink-lavender German Iris such as Avalon, Lohengrin, Mother of Pearl, Myth, Sympathy, Mademoiselle Swartz, Mrs. Allen Grey, San Gabriel, etc.
6. Specimen stalk of blue-lavender German Iris. Albert Victor, Mandalay, Mesopatamica, Caterina, Pallida, Princess Beatrice, Lord of June, Celeste, Bluet, Baronet Ballerine, Lady Foster, Swatara, Santa Barbara, etc.
7. Specimen stalk of White German Iris. Albicans, Florentina, Fenella, Saphronia, La Niege, Kashmir White, Fairy and Mrs. H. Darwin. The last two are not pure white but are usually classed thus.
8. Specimen stalk of Plicatas. Ma Mie, Madame Cherou, Jeanne D'Arc, Parisiena, Camelot, Damozel, Montezuma, Madame Chobaut.
9. Specimen stalk of pink German Iris. Dream, Queen of May, Her Majesty, Roseway, Cecil Minturn.
10. Specimen stalk of yellow German Iris. Sherwin Wright, Soledad, Shekina, Aurea, Flavescens, Primavera.
11. Specimen stalk of red-purple German Iris. Crimson King, Eduard Michel, Esplendido, Balboa, Magnifica, Kochi, Parc Neuilly, Monsignor, Archeveque, Julia Marlowe, Mestor, Seminole, Opera, Leverrier, Lent A. Williamson, Alcazar and Ambassadeur.
12. Specimen stalk of blue-purple German Iris. Amas, Joya, Perfection, Firmament, Souvenir de Madame Gaudichaud.
13. Specimen stalk of Blends. Arnols, Prospero, Laugier, Eldorado, Nibelungen, Medrano, Dr. Berenice, Quaker Lady, Asia, Madame Cheri, Sherbert, Steepway, Afterglow, Sindkjah, Isoline.
14. Specimen stalk of yellow and brown or variegata. Fro, Iris King, Moari King, Moari Princess, Marsh Marigold.
15. Specimen stalk of red and white bicolor or yellow and dark falls. Princess Victoria Louise, Rhine Nixie, Salonique and Mildred Presby.
16. Best German Iris Seedling not in commerce.
17. Collection of Iris not bearded such as Spuria, Regelia ,Sibirica, Oncocyclus, Stylosa.
18. Collection of bulbous Iris such as Dutch, Spanish and English.
19. Vase or basket of beardless Iris.
20. Vase or basket of beardless Iris with other flowers or foliage.
21. Vase or basket of German Iris.
22. Vase or basket of German Iris with or without other flowers or foliage.
23. Collection of California wild iris seedlings.

Many authorities differ on color classification and Iris Show committees sometimes find it difficult to place entries properly. It might be helpful if such committees prepare a color chart, based on a majority of opinions, for

RAINFORD FLOWER SHOP

Cut Flowers
Floral Designs

1115 Fourth Street *San Diego*

the judges and except in cases of manifest error such a color chart should govern.

The above classifications are based on an article in the A. I. S. bulletin of July, 1928, by R. S. Sturtevant and published material by Bonnewitz, E. W. Sheets, F. X. Schriener, and our own S. S. Berry.

CORALINN B. TUTTLE.

SHRUBS AND TREES IN GOLDEN GATE PARK

Compiled by Eric Walthers

(Courtesy Western Florist)

Abies amabilis
" cephalonica
" chensiensis
" cilicica
" concolor
" delavayi
" fargesi
" firma
" grandis
" homolepis
" magnifica
" nobilis
" nordmanniana
" numidica
" pectinata
" pinsapo
" veitchi
" venusta
Abrophyllum ornans
Acacia acinacea
" accola
" acuminata
" adunca
" alata
" arneura
" armata
" baileyana
" binerva
" myrtifolia
" confusa
" cyclops
" decora
" " decurrens
" " var. dealbata
" " var. mollissima
" dentifera
" dietrichiana
" dodonaeifolia
" elata
" fimbriata
" hastulata
" hispidissima
" implexa
" iteaphylla
" jonesi
" koa
" leprosa
" ligulata
" lineata
" longifolia
" " var. floribunda
" " latifolia
" " var. sophorae
" melanoxylon
" myrtifolia
" obliqua
" obtusata
" oxycedrus
" pentadenia
" podalyriaefolia
" privissima
" prominens
" pruinosa
" pubescens
" pycnantha
" retinodes
" riceana
" salicina v. wayae
" saligna
" stenoptera
" undulifolia
" verticillata
Acer campbelli
" campestre
" circinatum
" davidi
" hookeri
" japonicum
" laxifelorum
" macrophyllum
" negundo
" " var. californicum
" oblongum
" palmatum
" " var. (many)
" pictum
" platanoides
" " var. schwedleri
" pseudopoatanus
" rubrum
" rufinerve
" saccharinum
" saccharum
" trifidum

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" glabra
" hippocastanum
" indica
" turbinata
Agathis australis
" robusta
Agonis flexuosa
" linearifolia
" marginata
Ailanthus altissima
" imberbiflora
Albizzia julibrissin
" lopantha
Alectryon excelsus
Alnus rubra
Alsophila australis
Amelanchier asiatica
" canadensis
Angophora lanceolata
Aralia chinensis
Araucaria bidwilli
" cunninghami
" excelsa
" imbricata
" menziesi
Arbutus canariensis
" unedo
Argania sideroxylon
Azara celastrina
" integrifolia
" microphylla
Banksia littoralis
" occidentale
" grandis
" verticillata
Bellota miersi
Betula papyrifera
" pendula
" populifolia
" pubescens
Callistemon salignus
Callistris actinostrobus
" calcarata
" cupressiformis
" muelleri
" rhomboidea
Calodendron capense
Carpinus betulus
Carrieria calycina
Casimiroa edulis
Castanea dentata
" mollissima
" sativa
Casuarina cunninghami
" equisetifolia
" glauca
" horrida
" stricta
" suberosa
Catalpa bignonioides
" speciosa
Catha edulis
Ceanothus arboreus
" thyrsiflorus
Cedrela sinensis
Cedrus atlantica
" deodara
" libantotica
Celtis australis
" julianae
" labilis
" occidentalis
" sinensis
Ceratonia siliqua
Ceratopetalum apetalum
" gummiferum
Cercidiphyllum japonicum
Cercis canadensis
" chinensis
" siliquastrum
Cercocarpus traskiae
Chamaecyparis Lawsoniana
" nootkatensis
" obtusa
" pisifera
Chamaerops humilis
Chinonanthaus retusa
" virginica
Cinnamomum camphora
Citrus limonia
" sinensis
Clethra arborea
Cordyline australis
" indivisa
" terminalis
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